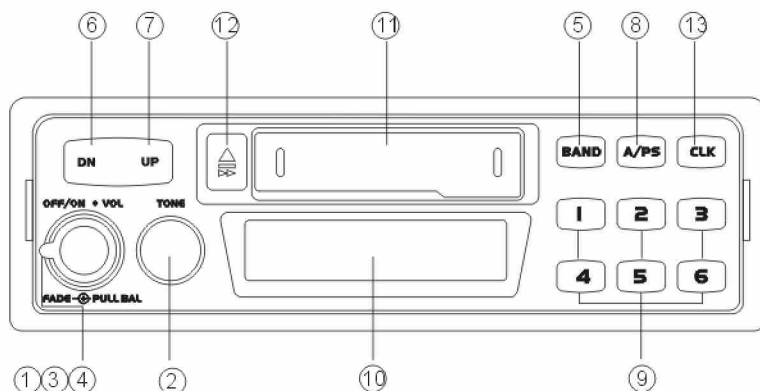


***Electronically-Tuned  
AM/FM/MPX Radio  
With Stereo Cassette Player  
and Quartz Clock***

**Model VR100**



**① ON-OFF SWITCH/VOLUME CONTROL**

Rotate this knob to the right to turn the radio on. Continue rotation until the desired volume level is obtained.

**② TONE CONTROL**

Rotate this knob either to the left or right to adjust the desired tone reproduction. Rotating the knob clockwise will increase treble response and counter-clockwise will increase bass response

**③ LEFT/RIGHT BALANCE CONTROL(PULL)**

Pull this knob outward until it locks into outer position. Rotate it to the left or right to obtain the desired balance between left and right speakers. Push knob back in to return to volume control position.

**④ FRONT/REAR FADER CONTROL**

Rotate this knob to the left or right to obtain the desired balance between front and rear speakers in 4 speaker installations. When used in conjunction with the Left/Right Balance Control ③, you have full 4-way stereo balance capability.

**⑤ FM/AM BAND SELECTOR**

Each time this button is pressed, the radio band is changed. The indications "AM1" or "AM2", "FM1" or "FM2" or "FM3" will appear in the display panel according to your selection.

**⑥ & ⑦ MANUAL UP/DOWN TUNING**

To manually select a radio station press the Up Tuning(UP) button ⑦ to advance the unit one digit higher or Down Tuning (DN) button ⑥ to tune downward. Pressing either button for longer than 0.5 second will cause the radio to tune rapidly in the selected direction.

**⑧ AUTO-STORE TUNING(AS)  
PRE-SET SCAN TUNING (PS)**

During radio operation, press this button momentarily to scan the twelve stations pre-set into the memories of the AM bands or the eighteen pre-set memories of the FM bands. The unit will stop at each pre-set station for 5 seconds before continuing to the next pre-set station (the channel indicator **number on the display will flash**). **Press the button again momentarily to stop the Pre-set Scan operation and remain on the selected frequency.** Pressing the button for longer than 1 second will activate the Auto-Store Tuning, which will automatically scan the band and enter the six strongest stations into the six pre-set memory positions for each band. If you have already set the pre-set memories to your favorite stations, activating the Auto-Store feature will erase those stations and enter the new strong stations. This feature is

most useful when travelling in a new area where you are not familiar with the local stations.

#### **⑨ STATION PRE-SET MEMORIES**

To set any of the 6 pre-set memories, use the following procedure:

1. Turn the unit on and select the AM1 band.
2. Select the first station to be pre-set using the Manual Tuning ⑥ & ⑦ .
3. Press the pre-set button to be set and continue to hold the button in. The volume will be muted for approximately 2 seconds and then return. The station is now set into that pre-set button. To recall that station, press the button momentarily.
4. Repeat the above procedure for the remaining 5 pre-sets on the band.
5. Select the AM2 band and enter 6 FM memories using the same procedure as above. In similar fashion, enter 6 pre-set memories on the FM1,FM2,FM3 Band.

#### **⑩ LIQUID CRYSTAL DISPLAY PANEL**

The Liquid Crystal Display(LCD) panel displays the frequency, time and activated functions.

Note: It is a characteristic of LCD panels that if subjected to cold temperatures for an extended period of time, they will take longer to illuminate than under normal conditions. In addition, the visibility of the numbers on the LCD may slightly decrease. The LCD read-out will return to normal when the temperature increases to a normal range.

#### **⑪ CASSETTE DOOR**

Hold the cassette with the exposed tape edge to the right and insert into the cassette door. Depress fully until the cassette is engaged and begins playing.

Note: Observe cassette operation Cautions in Care and Maintenance section of this manual.

#### **⑫ FAST-FORWARD/EJECT BUTTON**

This button performs two functions. To eject a cassette, simply press the button fully in and release. The cassette will eject and radio operation will resume. To fast-forward the tape, depress the button half-way in to the locked position. To stop fast-forward and resume normal tape playback, depress the button slightly and release. Do not press fully in or the cassette will be ejected.

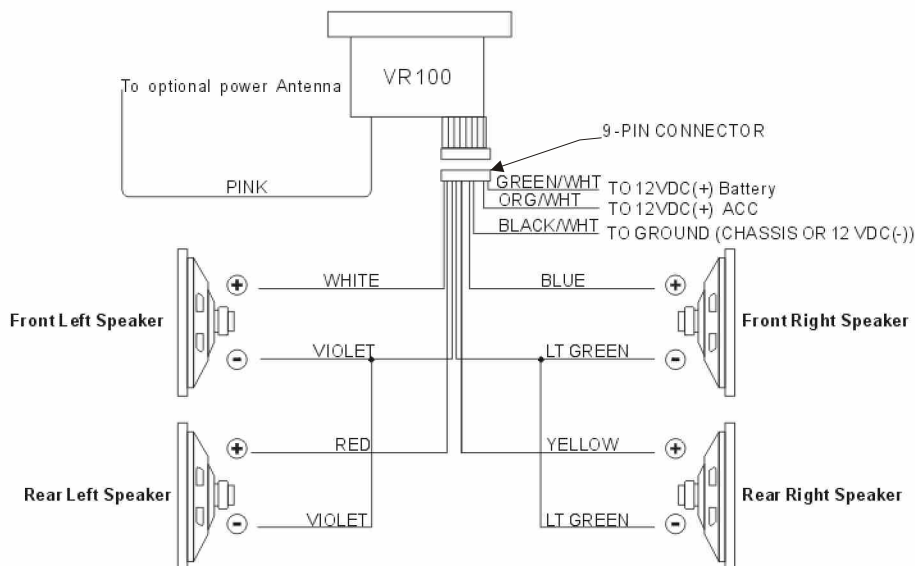
#### **⑬ TIME/FREQUENCY SELECTOR (CLK)**

During radio operation, push this button to call the time display on the incorporated quartz clock. Pressing the button again will return to frequency display, or it will automatically return after approximately 5 seconds.

#### **SETTING CLOCK**

1. Switch vehicle ignition "on" and radio "off" (time display will show on LCD Panel )
2. Press and hold the Time /Frequency Selector(CLK). at the same time, Press the Down Tuning button ⑦ to adjust the hours , then the Up Tuning button ⑥ to adjust the minutes.
3. After setting the correct time , release the Time/Frequency Selector.

## WIRING DIAGRAM

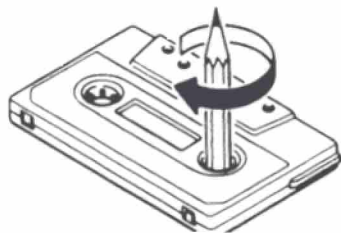


## SPECIFICATIONS

|                       |                                                                                           |
|-----------------------|-------------------------------------------------------------------------------------------|
| Size:                 | 7"(W) x 2" (H) x 6 1/8"(D)<br>178mm x 50mm x 156mm                                        |
| Operating Voltage:    | 12VDC, Negative Ground                                                                    |
| Output Power:         | 50 Watts Max. Stereo Power                                                                |
| Output Wiring:        | Floating Ground type<br>designed for 4 speaker use<br>May also be used with 2<br>speaker. |
| Output Impedance:     | Compatible with 4 or 8 ohm<br>speaker.                                                    |
| Tuning Range:         | (AM) 530-1710KHz<br>(FM) 87.5-107.9MHz                                                    |
| Sensitivity:          | (AM) less than 25uV<br>(FM) less than 5uV                                                 |
| FM Stereo Separation: | More than 23 dB                                                                           |
| Frequency Response:   | 50-10000Hz                                                                                |
| Wow & Flutter:        | Less than 0.3%                                                                            |

# CARE & MAINTENANCE

## IMPORTANT!



Your tape player should give you many years of enjoyment when these simple suggestions are followed.

- (I) 120 minute tapes are not recommended for automobile cassette players
- (II) Your tape heads should be kept clean at all times. Head cleaners are available at most stereo and tape dealers.
- (III) Cassette tapes will at times loosen up in the cassette cartridge. Before inserting cartridge be certain that the tape is tight.
- (IV) Due to the delicate nature of both the Cassette Tape and the Deck Mechanism. It is recommended that tapes not be inserted into the player before both the cassette and vehicle interior temperatures are above freezing.

### THE DRIVING HABITS OF AM AND FM RECEPTION

Although you may be familiar with both AM and FM reception in your home, you will experience notable differences in reception while driving your car. This page will explain why these variances occur and how they affect the broadcast you are listening to.

Both AM and FM provide excellent listening enjoyment and supply the diversified entertainment necessary to relieve the boredom of hours "behind the wheel" of your car. FM reception although unique in its characteristics while driving, provides a totally new sound experience unlike AM reception. The clarity of tone, the richness of sound and the varied program content provide hours of uninterrupted listening enjoyment. The few reception inconveniences common to FM are compensated by the many plus features of a sound experience rivaled only by a live sound performance.

Your new AM-FM radio or radio-tape system has been built to the strictest engineering standards available today and through quality components and construction will provide maximum performance under all conditions. A few minutes reading this page will enable you to obtain the most from FM reception and provide answers to your questions about the differences between AM and FM operation while driving in your car.

#### Some facts about AM and FM reception:

##### 1. RECEPTION IN TUNNELS

Although you will lose AM reception when driving through tunnels and under large bridges, it is common to continue to receive FM reception.

## 2. THE NUMBER OF STATIONS IN YOUR AREA

Depending upon your location you will usually find the number of AM stations in your area outnumber the number FM stations, although the continuing popularity of FM reception has significantly increased the number of FM stations nationwide.

## 3. RECEPTION DURING STORMS

Local electrical thunderstorm activity often produces sharp static sound when listening to AM stations although you will find that FM is unaffected

## 4. ELECTRICAL INTERFERENCE

When listening to AM stations, you may experience some buzzing sounds or static when passing electrical roadside power lines which does not interfere with FM reception, Conversely, FM may be affected by electrical noise from passing cars or trucks while AM reception is not.

## 5. FM RECEPTION RANGE

FM reception range is usually limited to 50 miles from the broadcast station. FM signals radiate straight out from the broadcast antenna. They do not follow earth's curve and are not reflected back to earth by the atmosphere resulting in limited "line of sight" reception range

## 6. AM RECEPTION RANGE

AM stations can be received several hundred miles from the broadcast station. AM signals follow the earth's curve and are easily reflected back to earth by the atmosphere. Therefore, an AM signal is easily received far from the broadcast station antenna.

## FM RECEPTION WHILE YOU ARE DRIVING

Since FM signals become weaker the further you drive away from the broadcast station you will experience flutter, noisy reception and fading in the poor signal fringe area. Through the modern circuitry in this radio, this "Fringe Area" has been greatly reduced for greater reception area. Even with this improved circuitry eventually the FM signal will become too weak to provide quality reception. When this occurs it is best to change to a stronger, local FM station.

Although FM signals are not reflected by the atmosphere they are easily reflected by solid objects. This effect of FM signals provides two totally different reception possibilities. First an FM signal can "bounce" between tall buildings resulting in unexpected reception in many areas where AM reception is impossible.

The same effect can result in the "loss" of an FM signal if a large obstruction is located between you and the FM antenna. If hills or buildings between you and the antenna block the signals, it is possible to find reception very poor even when you are not far from the FM antenna.

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## **AUDIOVOX SPECIALIZED APPLICATIONS, LLC**

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### **90 DAY/12 MONTH LIMITED WARRANTY**

AUDIOVOX SPECIALIZED APPLICATION, LLC (the company) warrants to the original retail purchaser of this product that should this product or any part thereof, under normal use and conditions, be proven defective in material or workmanship within 90 days from the date of original purchase, such defect(s) will be repaired or replaced (at the company's option) without charge for parts and repair labor. After the initial 90 day period and for a period of 12 months from the date of original purchase, the Company will supply at no charge a replacement for any defective part(s), but will charge for the labor to repair the product.

To obtain repair or replacement within the terms of this warranty, the product is to be delivered with proof of warranty coverage (e.g.: dated bill of sale), specification of defect(s), transportation prepaid, to an approved warranty station, or the Company at the address shown below.

This warranty does not extend to the elimination of externally generated static or noise, to the correction of antenna problems, to costs incurred for removal or reinstallation of the product, or to damage to any tapes, speakers, accessories, or electrical systems.

This warranty does not apply to any product or part thereof which, in the opinion of the company, has been damaged through alteration, improper installation, mishandling, misuse, neglect, or accident. THE EXTENT OF THE COMPANY'S LIABILITY UNDER THIS WARRANTY IS LIMITED TO THE REPAIR OR REPLACEMENT PROVIDED ABOVE, AND, IN NO EVENT, SHALL THE COMPANY'S LIABILITY EXCEED THE PURCHASE PRICE PAID BY THE PURCHASER FOR THE PRODUCT.

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